

moment of writing, uncertain whether or not this comparison has been made before.

The restoration of the text of the hymn and the translation by Prof. Murray is very interesting. I speak under correction, but is *παγκρατες γανους* really to be rendered by "Lord of all that is wet and gleaming"? Why should Zeus Kouros be lord of all that is "wet and gleaming"? Why not "bright and Gleaming"? Though no doubt *γανος* gives, strictly, the idea of "wet and gleaming," yet surely the reference is to the gleaming ripple of the cornfields, not to the sea?

Of the admirable character of the translation a specimen has been given above.

The myth of the Kouretes in its anthropological aspect is dealt with by Miss Jane Harrison, who treats it with her usual learning and wealth of illustration. Her conclusions are important, as bringing the dance of the Kouretes into connection with the initiatory rites at adolescence which are common among savage tribes; she aptly compares them with the initiation ceremonies in use among the Wiradthurí tribes of New South Wales. The scent on the Agia Triada vase derives a new significance from this comparison.

The director contributes a scheme for the transliteration of modern Greek, which is to be used in future by contributors to the "Annual," with the exception that *η* is to be transliterated by *e* and not by *i*. This seems rather too great a concession to the weaker brethren; it gives an entirely wrong impression of the pronunciation to those who are accustomed to the values of *e* and *i* in foreign words.

The volume is one of the most interesting that the school has produced, although for the first time we miss in it any description of Minoan or Mycenaean discoveries. But the resumed excavations at Phylakopi, in Melos, which are now to be taken in hand, will no doubt enable the School to contribute again very shortly important material for the study of prehistoric Greece.

H. R. HALL.

KOREAN METEOROLOGY—OLD AND NEW.¹

FOR the last six years a meteorological observatory, equipped with modern instruments, has existed at Chemulpo, and has been working energetically to establish a network of stations, from which the climatic elements of the country might be derived. Many difficulties have been encountered, but that these have been successfully overcome is shown by the issue of the first volume of scientific memoirs from the observatory, in which the director, Dr. Y. Wada, describes the progress that has been made and sketches the programme it is proposed to follow. He is to be congratulated upon the success of his vigorous direction, for a map shows that forty-five stations have been furnished with instruments, from which reports are received regularly. Most of these stations are scattered round the coast, at lighthouses, but there is also a chain of observatories running through the interior, and these no doubt will be increased as the country progresses.

A paper by Dr. T. Hirata shows that discussion proceeds simultaneously with the collection of observations. He investigates the amount of evaporation in Korea and South Manchuria, and its relation to precipitation. Although the data at present are slender, and the conclusions somewhat precarious, the inquiry is one of great economical importance, because the quantity of rain is barely sufficient to ensure the safety of the rice harvest on which the welfare of the

country largely depends, and all information connected with moisture is of deep significance.

But as such inquiries have only a local interest and would fail to attract attention, Dr. Wada has done

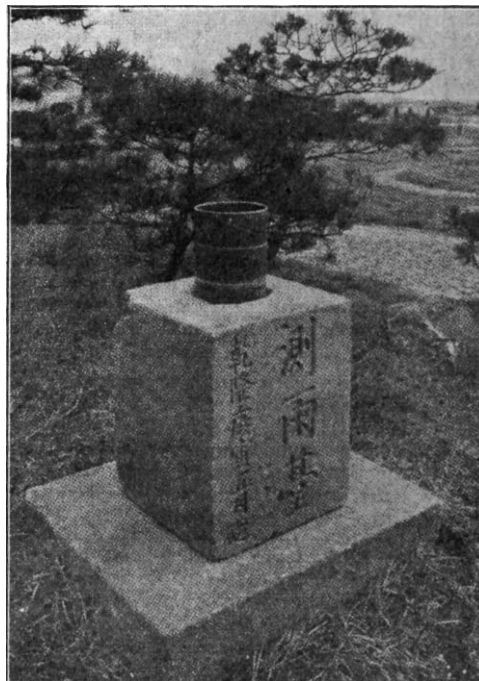


FIG. 1.—Old Rain gauge in Taiko.

well to quicken curiosity by reference to the science that flourished in the Korea of the past. He shows that the rain gauge, supposed to have been invented by Castelli, about 1639, was in use in the East long before its value

was appreciated in Europe. Dr. Wada, quoting from the second volume of the historical annals, explains that in the sixth year of the reign of King Sejo (corresponding to 1442 in the Gregorian Calendar), the King had a bronze instrument constructed to measure the rainfall. It was a vase of a depth of 30 cm. and a diameter of 14 cm. Every time rain fell, observatory officials measured the height and informed the King. But the important point

in this account is, that this was not a toy set up from curiosity, but that similar instruments were distributed throughout the provinces, and the results of all observations were reported to the court. Naturally

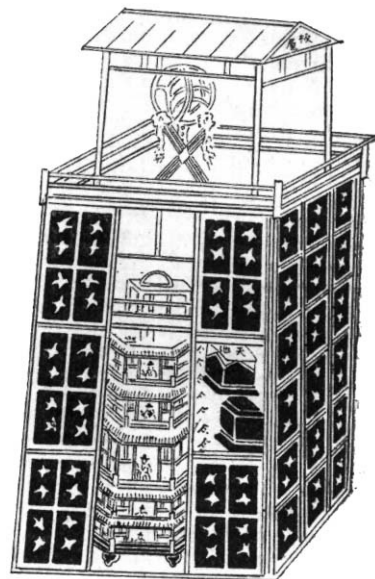


FIG. 2.—A Chinese Clepsydra of about 820 years ago.

¹ "Scientific Memoirs of the Korean Meteorological Observatory." Vol. i. Chemulpo, Korea, 1910.)

the director has endeavoured to recover specimens of these instruments and also the register of observations. Unfortunately, he has found no records and none of the original vases. But he has unearthed three copies of the pluviometer. The illustration reproduced here (Fig. 1) shows the instrument with the pedestal on which it stood. This instrument dates back to 1770. The three large Chinese characters declare that it is an instrument to measure rain, and the seven smaller give the date of its construction, in Chinese reckoning. Several pillars have been found without pluviometers attached, and one is particularly interesting, as a long Chinese inscription is engraved upon it, and though some of the characters have been obliterated by time, enough remains to connect it with the original order of King Sejo.

This same king erected astronomical observatories and fitted them with excellent instruments for the time. He seems to have prided himself on the possession of an automatic clepsydra, in which the hours and quarters were sounded by manikins. The general form of clepsydra seems to have consisted of four vessels at different levels, "and water poured in the highest vessel flows, passing through the intermediate ones, into the lowest, where an arrow with graduations to indicate the time in its upper part, was floated." Fig. 2 gives the general form of the instrument, but the mechanism is not well shown. Dr. Wada also reproduces a photograph of an ancient observatory, demonstrating the forward state of science of the age, about 647 A.D. It is supposed to have been used for the making of observations to correct the calendar, but there is nothing in the picture to suggest that it ever formed part of an observatory. It is simply a tower-like structure.

THE ADMISSION OF WOMEN TO THE FRENCH ACADEMIES.

WE learn from the *Times* of January 5 that at the recent quarterly plenary meeting of the five academies of the French Institute, the question of the eligibility of women candidates for the institute came up for consideration. It arose from the circumstance that Mme. Curie, the discoverer of radium, has been put forward as a candidate for one of the vacant seats in the Academy of Sciences. How her claims are regarded by that body may be inferred from the fact that in the list as finally submitted her name stands at the head. It is stated that at the general meeting more than 150 academicians were present, and that the proceedings, as might have been expected, "were extremely animated." Eventually the motion in favour of the admission of women was rejected by 90 votes to 52. The institute further adopted a motion to the effect that whilst it did not presume to dictate to the separate academies, there was, in its opinion, "an immutable tradition against the election of women, which it seemed eminently wise to respect."

It remains to be seen what the Academy of Sciences will do in face of such an expression of opinion. Mme. Curie is deservedly popular in French scientific circles. It is everywhere recognised that her work is of transcendent merit, and that it has contributed enormously to the prestige of France as a home of experimental inquiry. Indeed, it is not too much to say that the discovery and isolation of the radio-active elements are among the most striking and most fruitful results of a field of investigation pre-eminently French. If any prophet is to have honour in his own country—even if the country be only the land of his adoption—surely that honour ought to belong to Mme. Curie. At the moment, Mme. Curie is without a doubt, in the eyes of the world, the dominant figure

in French chemistry. There is no question that any man who had contributed to the sum of human knowledge what she has made known, would, years ago, have gained that recognition at the hands of his colleagues which Mme. Curie's friends are now desirous of securing for her. It is incomprehensible therefore, on any ethical principles of right and justice, that because she happens to be a woman she should be denied the laurels which her pre-eminent scientific achievement has earned for her.

There may be room for difference of opinion as to the wisdom or expediency of permitting women to embark on the troubled seas of politics, or of allowing them a determinate voice in the settlement of questions which may affect the existence or the destiny of a nation; but surely there ought to be no question that in the peaceful walks of art, literature, and science there should be the freest possible scope extended to them, and that, as human beings, every avenue to distinction and success should unreservedly be open to them.

All academies tend to be conservative and to move slowly; they are the homes of privilege and of vested interest. Some of them even incline to be reactionary. They were created by men for men, and for the most part at a time when women played little or no part in those occupations which such societies were intended to foster and develop. But the times have changed. Women have gradually won for themselves their rightful position as human beings. We have now to recognise that academies as seats of learning were made for humanity, and that, as members of the human race, women have the right to look upon them as their heritage and property no less than men. This consummation may not at once be reached, but as it is based upon reason and justice it is certain to be attained eventually.

NOTES.

AN earthquake of unusual violence occurred in Russian Turkestan at 1.25 a.m. on January 4, or shortly after 11 p.m. on January 3 (Greenwich mean time). At Vyernyi, the chief town of the district, with more than 11,000 inhabitants, the shock lasted for nearly five minutes, and has been succeeded by a large number of after-shocks. Nearly every building in the town is damaged, and all the mud-houses in the neighbourhood have collapsed. The total loss of life is unknown, but forty bodies have so far been recovered from the ruins. It is reported that the whole of the town of Prjevalsk, which is situated on the shores of lake Issik Kul, has been destroyed by the waters of the lake. The extraordinary violence of the earthquake is attested by its effects on the seismographs of distant observatories. At Pulkova, more than 2200 miles from the epicentre, practically all the instruments were thrown out of order. This was the case even in this country. At West Bromwich, the first tremors were recorded at 11.35 p.m., and soon attained a range of 15 mm. By 11.54 the range was far beyond the capacity of the instrument, and at midnight the east-west needle collapsed. The great movement continued until 12.12 a.m., and the disturbance did not end until 3.56 a.m., giving a total duration of $4\frac{1}{4}$ hours. At Cardiff the maximum movement was registered at 12.14 a.m., and was so great that the instrument was deranged. At Limerick all the instruments were dismounted. The earthquake, which is one of the greatest of the last quarter of a century, is evidently a successor of that which occurred on June 9, 1887, when Vyernyi suffered even greater injury than on the recent occasion, owing to the prevalence of stone buildings, which have since been largely replaced by wooden ones.